## Letters to the editor

# MERCURY INHALATION AS A SUICIDE ATTEMPT IN A PATIENT WITH DEPRESSION AND NARCISSISTIC PERSONALITY DISORDER

### **DEAR EDITOR:**

Mercury as a means of suicide has been rarely mentioned in case reports. Most cases described deal with suicide attempts by intravenous injection of metallic mercury. To our knowledge, there is only one previously published case of an attempted suicide by inhalation of mercury vapor. 3

Reported herein is the case of a 26-year-old male patient, who tried to commit suicide by heating liquid mercury from a clinical thermometer and inhaling the mercury vapor. He suffered from an untreated episode of depression for several weeks and developed a suicidal attitude with thoughts about the loss of sense in his life and even a certain "longing" for death. A friend noticed a change in the patient's behavior and the patient confessed that he had inhaled mercury. He was admitted to the hospital one week after mercury inhalation. At this time, the patient complained about mild headache, nausea, feeling of "pulmonary pressure," and restlessness. The mercury blood level was elevated up to 12.0Ìg/L (reference range: up to 5.0µg/L). The patient did not show any neurological symptoms, and after an observational period of six days he was transferred to a psychiatric hospital because of persisiting suicidality. He was treated under the diagnosis of a severe episode of depression with a combination of duloxetine (60mg per day) and low-dose mirtazepine (7.5mg per

day) and with psychotherapy. After six weeks, he was not suicidal. We started treating him in our day hospital three months later because of a reactualization of suicidal tendencies. We did not note any pathological neurological findings, and a cerebral magnetic resonance imaging (MRI) did not show any mercury-related alterations. Interestingly enough, the patient reported another suicidal attempt several years previously by attempting to hang himself from a tree in the city's forest. The current choice of suicidal means was rather extraordinary when combined with his extreme longing for the suicide. Along with the depression, he met the diagnostic criteria of a narcissistic personality disorder according to ICD-10 (F60.80). After several weeks, the patient was discharged in a stabilized condition and was scheduled to begin psychotherapy as an outpatient.

Attempted suicides by deliberate mercury poisoning are an interdisciplinary challenge due to the high toxicity of metallic mercury and the potential longterm effects of intoxication up to and including delayed lethal courses.4 In our case, the somatic complications of mercury inhalation were mild, but the patient showed long-lasting suicidal ideation. Although poisoning by metallic mercury has become quite rare, clinicians should be aware of the possibility of this excentrical form of deliberate intoxication in patients with suicidal ideation since early treatment (i.e., with chelating agents)<sup>5</sup> may reduce the risk of very serious, irreversible effects. Also, rare and

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extraordinary methods of suicidal attempts may be more often found in patients who suffer from a combined depression and a narcissistic personality disorder.

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With regards,

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